



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,152	02/18/2004	Marcus Bitter	09147-US	5027
7590	09/09/2005			
Jimmie R. Oaks Patent Department DEERE & COMPANY One John Deere Place Moline, IL 61265-8098			EXAMINER LOPEZ, FRANK D	
			ART UNIT 3745	PAPER NUMBER

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/782,152

Applicant(s)

BITTER ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/18/04, 8/20/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 112***

Claims 2- 5, 7, 8, 11 and 12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2 line 2 "a set-up agent" is confusing, since it appears to be an integral part of the flow control valve claimed in subsequent claims and is not disclosed or shown as being a specific element.

In claim 4 line 1-4 "said valve arrangement includes a flow control valve...being operative for changing the flow rate as a function of the flow and limits it to a predetermined optimum value" is confusing, in combination with claims 2 and 3 from which it depends; since it is unclear whether the changing of the flow rate as a function of the flow is the same as or different from the control by pressure signals from the first chamber and reservoir (claim 2). If different, It appears to be claiming limitations from different species, since the limitations of claim 2 is specific to species of figure 2 and this limitation is not.

Claim 5 is confusing, since it ultimately depends from claim 2, which is specific to figure 2, but claims a check valve, which is specific to the species of figure 1.

Claim 7 is confusing, since the functions of the pipe break safety valve has been claimed in claims (e.g. claim 2 and 6) claim 7 is dependent from.

In claim 11 line 1-3 "a load holding valve arrangement is coupled in at least one of said first and second supply lines" is wrong, since the disclosure only discloses the load holding valve in the first line (i.e. the line with a on-off valve, 50, connected to a reservoir by a valve arrangement, 52).

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9 and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dueckinghaus et al (which is the same as German 10,006,908, see discussion below).

Claim 12 is rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Dueckinghaus et al. Dueckinghaus et al discloses a hydraulic control circuit comprising a control valve (11) selectively connecting a pump (18) or reservoir (17) to either a first (14) or a second chamber; wherein a first line includes an on-off valve (21) and a valve arrangement (20) between the first chamber and the reservoir; wherein a load-holding valve (13) is in a first supply line (12) between the control valve and the first chamber; wherein the load-holding valve includes a check valve in parallel with a stop valve; and wherein the stop valve includes pilot lines connected to the first and second chambers, to open the stop valve, but does not show a spring biasing the valve closed. These stop valves are well known as having a spring biasing the valve closed. Therefore, the stop valve of Dueckinghaus et al inherently has a spring biasing it closed, or it would have been obvious at the time the invention was made to one having ordinary skill in the art to include a spring biasing the stop valve of Dueckinghaus et al closed, as a matter of engineering expediency.

Claims 1, 9 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Japan 10-168,949. Japan 10-168,949 discloses a hydraulic control circuit comprising a control valve (41) selectively connecting a pump (42) or reservoir (47) to either a first or a second chamber (37, 38); wherein first and second lines includes on-off valves (39, 40) and a valve arrangement (56) between the first and second chambers, respectively, and the reservoir.

Claims 1 and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Scheidt (see discussion below).

Claims 2 is rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Scheidt. Scheidt discloses a hydraulic control circuit comprising a control valve (14) selectively connecting a pump (13) or reservoir (12) to either a first or a second chamber of a cylinder (10); wherein a first line includes an on-off valve (25) and a valve arrangement (26) between the first chamber and the reservoir; wherein the valve arrangement is a pressure relief valve in

Art Unit: 3745

parallel with a check valve (21), wherein the pressure relief valve is spring biased to a closed position and the through-flow opening is changed by pressure from the first chamber; but does not show that the through-flow opening of the pressure relief valve is changed in response to a pressure signal from the reservoir. Pressure relief valves connected to a reservoir are well known to have a pressure surface acted on by fluid pressure from the reservoir to close the pressure relief valve. Therefore, the pressure relief valve of Scheidt inherently has a pressure surface acted on by fluid pressure from the reservoir to close the pressure relief valve, or it would have been obvious at the time the invention was made to one having ordinary skill in the art to include a pressure surface acted on by fluid pressure from the reservoir to close the pressure relief valve of Scheidt, as a matter of engineering expediency.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 10 and 13 are rejected under 35 U.S.C. § 103 as being unpatentable over Scheidt in view of Theobald and Dueckinghaus et al. Scheidt discloses all the elements of claims 10 and 13, as discussed above, and including that the first on-off valve is also located in a second line (23) between the second chamber and the reservoir; but does not disclose that there is a second on-off valve in the second line, wherein the first and second on-off valves are electromagnetic seat valves.

Art Unit: 3745

Theobald teaches, for a hydraulic control circuit comprising a control valve (18) selectively connecting a pump (13) or reservoir (14) to either a first or a second chamber of a cylinder (12); wherein first and second lines (28, 29, respectively) selectively connect the first and second chambers, respectively, with the reservoir; that the first and second lines include first and second on-off valves (31, 32), respectively.

Dueckinghaus et al teaches, for a hydraulic control circuit comprising a control valve (11) selectively connecting a pump (18) or reservoir (17) to either a first (14) or a second chamber; wherein a first line includes an on-off valve (21) and a valve arrangement (20) between the first chamber and the reservoir; that the on-off valve can be an electromagnetic seat valve.

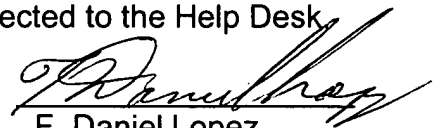
Since the on-off valves of Scheidt, Theobald and Dueckinghaus et al are functionally equivalent in the hydraulic circuit art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the first on-off valve of Scheidt two on-off valves, each being in a respective one of the two lines, as taught by Theobald, as a matter of engineering expediency; wherein each of the on-off valves are electromagnetic seat valves, as taught by Dueckinghaus et al, as a matter of engineering expediency.

### ***Conclusion***

Claims 3-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571- 272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
September 2, 2005